IN THE SPECIFICATION

Page 1, line 14; please replace "knwon" with -- known -- .

Page 4, line 25; please delete "or aluminum fibers", which was inserted in this line by a prior Amendment.

IN THE CLAIMS

Please implement the amendments to the claims which are set forth below. Amendments made by this paper are indicated by bold type. For the convenience of the Examiner, all of the pending claims are set forth below in logical order, rather than in numerical order.

Please cancel Claims 5-6, 11-12, and 23-24 without prejudice.

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1. **(Four times Amended)** [A] **An apparatus comprising a** heat sink which [comprises:] **in its entirety can absorb heat over time, said heat sink including:**

(a) an enclosure **defining an enclosed cavity and** having a highly thermally conductive [surface region] **portion** composed of a composite of highly thermally conductive fibers disposed [to provide] **in** a matrix [, said enclosure including said highly thermally conductive surface region defining an enclosed cavity];

(b) a plurality of said fibers extending externally of said matrix and into said cavity to provide a porous, highly thermally conductive material integral with and thermally coupled to said highly thermally conductive [surface] **portion** and disposed in said cavity, said porous material being said plurality of said thermally conductive fibers extending from said matrix into said cavity, and

(c) a phase change material **disposed in said porous material in said cavity, said phase change material being operable in its entirety to absorb heat over time,**

and said phase change material changing from [its] **an** initial phase to [its] **a** final phase [responsive] **in response** to the absorption of heat [disposed in said enclosed cavity and in said porous material].

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21. **(Amended)** The [heat sink] **apparatus** of claim 1 wherein said phase change material is a wax.

17. **(Twice Amended)** The [heat sink] **apparatus** of claim 1 wherein said thermally conductive fibers are graphite.

7. **(Amended)** The [heat sink] **apparatus** of claim 1 wherein said porous material is substantially homogeneously disposed within said cavity.

19. **(Twice Amended)** The [heat sink] **apparatus** of claim 7 wherein said thermally conductive fibers are graphite.

2. **(Amended)** The [heat sink] **apparatus** of claim 1 wherein said initial phase of said phase change material is [the] **a** solid phase and said final phase is [the] **a** liquid phase.

22. **(Amended)** The [heat sink] **apparatus** of claim 2 wherein said phase change material is a wax.

18. **(Twice Amended)** The [heat sink] **apparatus** of claim 2 wherein said thermally conductive fibers are graphite.

8. **(Amended)** The [heat sink] **apparatus** of claim 2 wherein said porous material is substantially homogeneously disposed within said cavity.

20. **(Twice Amended)** The [heat sink] **apparatus** of claim 8 wherein said thermally conductive fibers are graphite.

Please add the following claims:

~~25.~~ 11 **(New) An apparatus comprising a heat sink which in its entirety is operable to effect over a period of time a net absorption of heat from externally thereof, said heat sink including:**

an enclosure having a cavity therein, said enclosure having a highly thermally conductive portion;

a highly thermally conductive porous material disposed within said cavity and coupled physically and thermally to said highly thermally conductive portion of said enclosure; and

a phase change material provided within said cavity so as to be disposed within and substantially fill said voids in said porous material, said phase change material being operable in its entirety over a period of time to effect a net absorption of heat introduced thereinto through said highly conductive portion and said porous material, said phase change material changing in its entirety from a solid phase to a liquid phase in response to said absorption of heat by said phase change material.

~~26.~~ 12 **(New) The apparatus of claim ~~25~~ 11, wherein said phase change material is free of substantial movement within said cavity.**

~~27.~~ 13 **(New) The apparatus of claim ~~25~~ 11, wherein said porous material includes a plurality of highly thermally conductive fibers.**

~~28.~~ 14 **(New) The apparatus of claim ~~25~~ 11, wherein said portion of said enclosure includes a composite of highly thermally conductive fibers which are**

disposed in a matrix and which have portions extending from said matrix into said chamber.

29. (New) The apparatus of claim 25, wherein said portion of said enclosure is made of a metal, and wherein said porous material is made of a metal and is brazed to said portion of said enclosure.

30. (New) A method of operating a heat sink so that, over a period of time, said heat sink will in its entirety experience a net absorption of heat from externally thereof, said heat sink including an enclosure with a highly thermally conductive portion, a highly thermally conductive porous material which is disposed within a cavity in said enclosure and which is coupled physically and thermally to said highly thermally conductive portion of said enclosure, and a phase change material which is provided within said cavity so as to be disposed within and substantially fill said voids in said porous material, said method including the steps of:

applying heat to said highly thermally conductive portion of said enclosure from externally of said enclosure;

transmitting heat through said highly thermally conductive portion of said enclosure and through said porous material to said phase change material;

causing said phase change material in its entirety to effect, over a period of time, a net absorption of heat introduced thereinto through said highly thermally conductive portion of said enclosure and said porous material ; and

causing said phase change material to change in its entirety from a solid phase to a liquid phase in response to said absorption of heat by said phase change material.

31. (New) The method of claim 30, including the step of causing said phase change material to be substantially free of movement within said cavity.